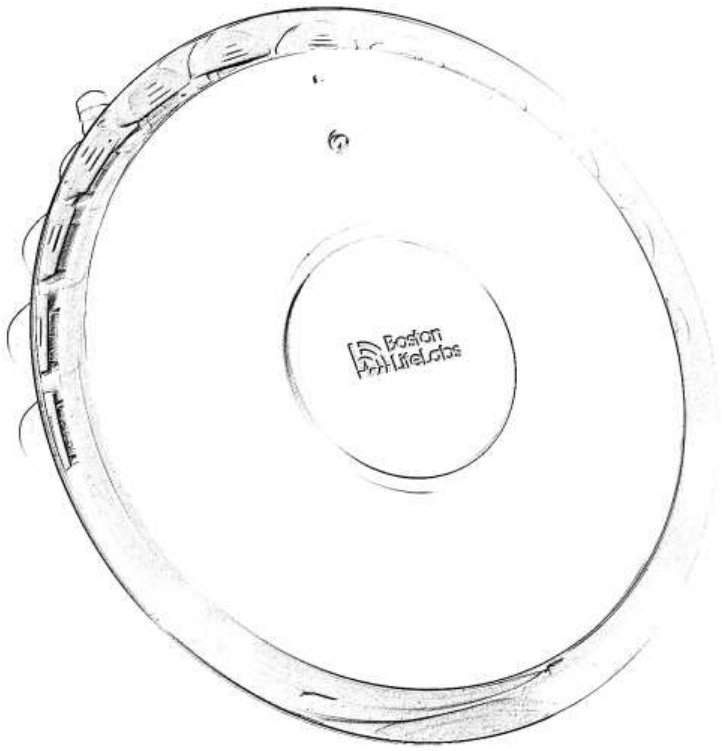
Boston LifeLabs
Telehealth Solutions

Wireless Telehealth Hub

H-Box



Boston Life Labs LLC.

Instructions to User

Dear Users,

Thank you for purchasing our product. Please read the manual carefully before using this device. Failure to follow these instructions may cause measuring abnormality or equipment damage.

The Manual is published in English and Boston Life Labs LLC. has the ultimate right to explain the Manual. No part of this manual may be photocopied, reproduced or translated into another language without the prior written consent. Boston Life Labs LLC. reserves the right to improve and amend it at any time without prior notice.

Version of this manual: Ver 1.0

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Boston LifeLabs
Telehealth Solutions

Notes:

- The contents contained in this manual are subject to change without notice.
- Information furnished by our company is believed to be accurate and reliable. However, no responsibility is assumed by us for its use, or any infringements of patents or other rights of third parties that may result from its use.

Instructions for Safe Operations

- Read all information in the instruction manual and any other literature included in the box before using the unit.
- Operate the unit only as intended. Don't use for any other purpose.
- Necessary maintenance must be performed only by qualified service technicians. Users are not permitted to maintain it by themselves.

Cautions

- Explosive hazard—**DO NOT** use the equipment in environment with inflammable gas such as some ignitable anesthetic agents.

Warnings

- The local law must be followed when disposing of the device.

Attentions

- Keep the device away from dust, vibration, corrosive substances, explosive materials, high temperature and moisture.
- The device should be kept out of the reach of children.
- If the equipment gets wet, please stop using it and do not resume operation until it is dry. When it is carried from a cold environment to a warm and humid environment, please do not use it immediately.

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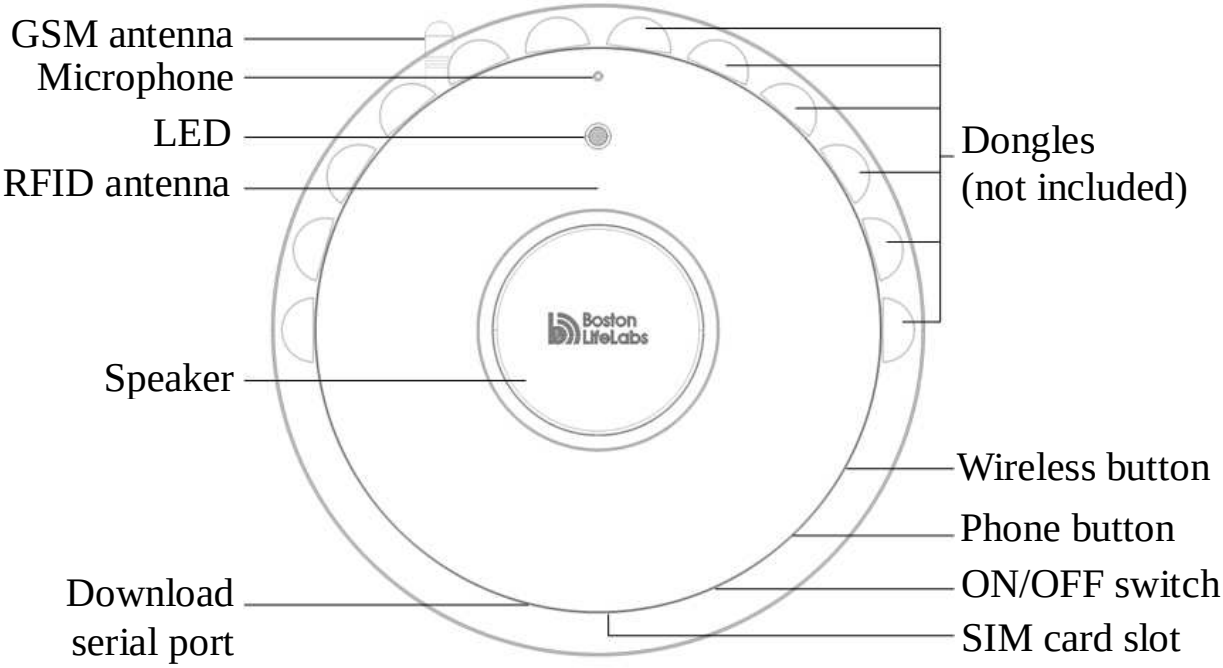
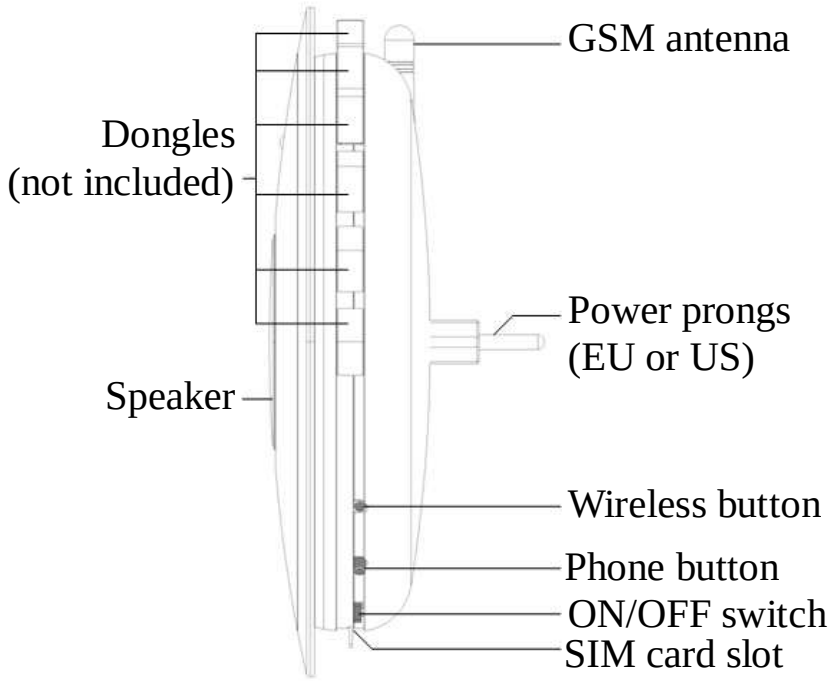
1 Overview

1.1 Appearance



H-Box Front



H-Box Bottom

The Wireless Telehealth Hub includes 12 dongle slots located all around the upper part of the equipment. Each dongle slot can receive one dongle.

1.2 Features

The Wireless Telehealth Hub is a GSM-based equipment with telehealth and social alarm functions.

- Automatically capture data from wireless sensors and send them to a remote secure server;
- Receive signal from panic button to trigger social alarm phone call;
- Read RFID tags to trigger specific actions;

1.3 Name and Model

Name: Wireless Telehealth Hub

Model: H-Box

1.4 Applications and Scope

The Wireless Telehealth Hub is intended for home and medical center to transmit health data from wireless device to secure remote server and make emergency phone calls.

2 Basic Operations

The equipment is “plug & play” and doesn’t require

any complex user action to function.

2.1 Power Supply

The device is either powered by a standard AC socket or by its internal batteries (capacity of up to 12 hours).

Each time the Wireless Telehealth Hub plugged in or out of the AC socket, a deep “beep” sound is played.

2.2 Power On

1. Plug the back prongs into the AC socket.

2. Slide the ON/OFF switch to left, a sharp “beep” sound is heard and the LED is red for 3 seconds.

3. Then a greeting music is played, the LED turns blinking orange which means the Wireless Telehealth Hub is searching the GSM network. When network is found, the GSM equipment is registered and the LED turns green.

4. Then the Wireless Telehealth Hub is making a registration connection to the remote server, a clear “Ok” tone is played when complete. The Wireless Telehealth Hub is ready.

2.3 Power Off

At anytime, slide the ON/OFF switch to the right, the Wireless Telehealth Hub will shut down with a sharp “beep”.

3 Telehealth Function

3.1 Enable/Disable Wireless Device

In order for the Wireless Telehealth Hub to be enabled for receiving data from a new wireless device, simply insert the wireless device dongle (provided with the wireless device) inside one available slot of the Wireless Telehealth Hub.

Dongle

In order to disable a wireless device, simply pull off the matching dongle from the Wireless Telehealth Hub.

Each time a dongle is inserted in or pulled off a dongle slot, the Wireless Telehealth Hub is synchronized with the server to allow receiving data. This synchronization can take up to 30 seconds; when complete, the valid dongles slowly blink one time.

3.2 Data Transfer

If a wireless device is enabled with the Wireless Telehealth Hub (see above) and the user makes a measurement (also make sure the wireless device is properly setup, see specific user manual for details), the result value is automatically sent to the Wireless Telehealth Hub and the remote secure server, the matching dongle is fast blinking during data transmission.

If the connection between the wireless device and the Wireless Telehealth Hub after the data is transmitted, the matching dongle slow blinks until the connection is dropped or used again.

3.3 How It Works

When some dongles are plugged in, the Wireless Telehealth Hub periodically enters into Bluetooth® inquiring mode and will search for surrounding wireless Bluetooth® devices. If a compatible Bluetooth® device is found and its device ID matches one of the dongle ID, the Bluetooth® device will automatically pair and connect with the Wireless Telehealth Hub.

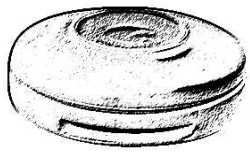
4 Social Alarm Function (option)

4.1 Description

The social alarm function (also called P.E.R.S. for Personal Emergency Response System) allows the holder a panic button to automatically call the emergency services by simply pressing the button.

4.2 Panic button

For Social Alarm functions, a panic button is necessary; it can be used either as a wrist or a pendant.



Panic button

- When pressed, a small LED is blinking for 10 seconds inside the casing (behind the rubber part)
- It doesn't require to be recharged, the internal battery life is up to 5 years;
- The range of the panic button is above 100m

Never try to open a panic button.

4.3 Emergency Call

When the button of the panic button is pressed by its holder, a signal is sent to the Wireless Telehealth Hub,

that signal triggers a phone call to a preset number. When the phone call is established, a 2 way conversation is enabled; the remote emergency service center operator already has all the information about the caller and can take further action according to the conversation outcome.

4.4 Setup & Test

Paring: Longtime press the Wireless button for 3 seconds, the Wireless Telehealth Hub plays a sharp beep sound and enters into pairing mode for 1 minute. If the button of a panic button is pressed, the Wireless Telehealth Hub plays a sharp beep sound meaning that the panic button is properly paired with the Wireless Telehealth Hub.

Longtime press both the Wireless and Phone buttons for about 3seconds to delete all the paired information and enter into pairing mode.

Test Call: In order to perform a test emergency call, press either the button of the panic button or longtime press the Phone button of the Wireless Telehealth Hub. Press or longtime press the Phone button again to end the call.

5 RFID Tag Reading

An RFID reader antenna is located between the LED and the speaker. When the RFID reader is powered on, it can read any compatible RFID or NFC tag and the Wireless Telehealth Hub can trigger an action based on the software version.

In order to power on the RFID reader antenna for 1 minute, press the Wireless key.

When a tag is read by the RFID reader, a deep “beep” is played.

Note: RFID tags should be ISO14443A/MIFARE compatible.

6 Exceptional Situations

Error Indicators: TBD

Symbol	Cause	Correction

Error Indicators: TBD

Problem	Causes and Solutions

7 Technical Specifications

A. Model No: H-Box

B. Color: White

C. Dimensions: ¢ 170mm*70mm

D. Weight: TBD

E. External Power: AC 110V-240, 50/60Hz

F. Internal Power: 3.7V Li-ion battery

G. Indicator: LED with Red, Green, Orange color

H. Speaker: 4 ohm, 5W

I. Microphone: -42dB±3dB

J. Operation Temperature: 0-45℃

K. GSM: Quad-band 850/900/1800/1900

L. RFID: ISO14443A/MIFARE compatible

8 Maintenance

In order to ensure the long service life of the device, please pay attention to the use of maintenance.

A. TBD

B. TBD

C. The best storage environment of the device is -20ºC to 60ºC ambient temperature and 10~95% relative humidity.

⚠ **Do not immerse the device in liquid.**

⚠ **It is recommended that the device should be kept in a dry environment. Humidity may reduce the life of the device, or even damage it.**

Appendix

Key of Symbols

Symbol	Description
	Wireless button
	Phone button
Off On	To power on or off the equipment
SN	Serial number
	Separate collection for this device.

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Email: info@bostonlifelabs.com
Website: www.bostonlifelabs.com

Label:

Model Name:H-Box Brand Name:Boston Life Labs

FCC ID: YTKH-BOX

This device complies with Part 15 of the FCC Rules,Operation is subject to the following two conditions:
1. This device may not cause harmful interference and
2. This device must accept any interference that is received, including any interference that may cause undesired operation.

WARNING:
Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipments.
We recommend the minimum use distance is 50cm.